TAB

The Department of Defense Computer Institute functions under the Secretary of the Navy who reports directly to the Secretary of Defense on the operation of the Institute.

The DODCI staff is composed of military personnel from all services, augmented by civilian employees. Professionally recognized authorities in the military and civilian computer field participate as guest lecturers.

DODCI has access to the Naval Command Systems Support Activity (NAVCOSSACT) large-scale computer installation.

DODCI courses are conducted primarily for senior military and civilian executives within the Department of Defense. Personnel from other government agencies are invited on a space available basis. The DODCI assigns course quotas directly to the Military Departments and Defense Agencies.

Quota requests from other government agencies should be forwarded to the Director, Department of Defense Computer Institute, U.S. Naval Station Annex, Washington, D. C. 20390.
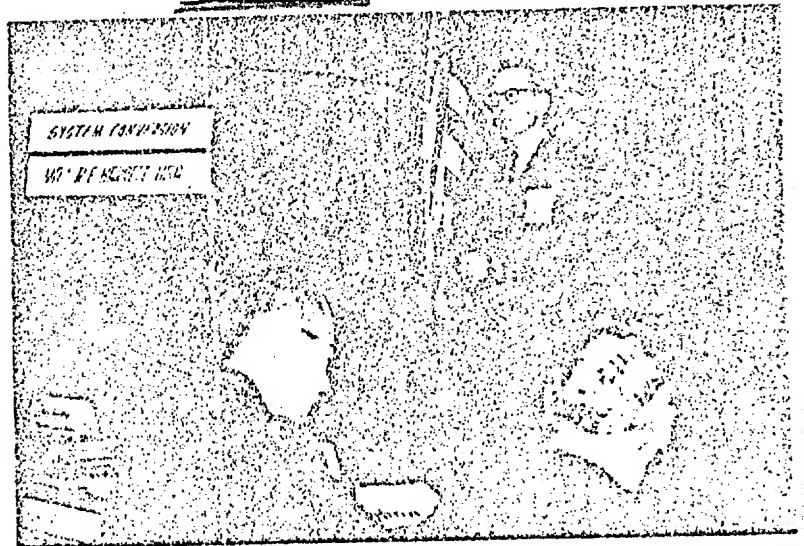
courses

Computer courses offered by the Institute are:

SENIOR EXECUTIVE COURSE: For Flag/General officers, and civilian executives GS-16 and above
One week-11 times annually

INTERMEDIATE EXECUTIVE COURSE: For officers (0-5/6) and civilian executives (GS-14/15).
Two weeks-13 times annually

COMMAND AND CONTROL ADP SYSTEMS COURSE: For officers (0-3/4/5) and civilian executives (GS-12/13/14). Three weeks-9 times annually

SPECIFICATIONS FOR SELECTION COURSE: For officers (0-2/3/4/5) and civilian executives (GS-11/12/13/14). Eight days-4 times annually

COMPUTER TECHNOLOGY COURSE
Officers   (O-3/O-4/O-5)
Civilians   (GS-12/13/14)
Two weeks

Title:	INTERMEDIATE EXECUTIVE COURSE (COMPUTER TECHNOLOGY)
Facility:	Department of Defense Computer Institute
Location:	Navy Yard, Washington, D. C.
Duration:	2 weeks
Frequency:	13 times annually
Cost:	None
Description:	Designed to acquaint senior military and civilian executives with the application and operation of digital computer systems. Topics include computer and programming fundamentals, higher level languages, real-time considerations, systems development cycle, command and control ADP systems and concepts, computer driven displays, survey of applications, files and data bases, man/machine relationships, concepts of the world-wide military command and control system, operational considerations, computer program costing, standards and compatability, computer evaluation and acquisition.
Prerequisites:	Officers (0-5/6) and civilian executives (GS-14/15) Non-DOD personnel on a space-available basis.

Questions and interest in
quota assignments should be
addressed to:

Director
Department of Defense
Computer Institute
c/o Naval Command Systems
Support Activity
U. S. Naval Station
(Washington Navy Yard Annex)
Washington, D. C. 20390

Telephone Information:
DoDCI Administrative Office
Area Code 202—Oxford 6-2803

DEPARTMENT OF DEFENSE COMPUTER INSTITUTE

INTERMEDIATE EXECUTIVE COURSE

Computer Logic

Circuits, adders, signals and codes. Design of logical selection circuits. Core and drum memory. Principles of computers that perform arithmetic operations by adding vs. those that do it by subtracting. Computer interfaces.

Number Systems

Conversion from one number system to another. Arithmetic operations in various number systems. Decimal, binary, octal operations.

Programming - Basic

Principles of problem analysis, charting and coding. Machine language programming - each student writes and debugs six problems on the UNIVAC Digital Trainer. FORTRAN - each student writes and debugs three programs. Programs are key punched on cards and are compiled and run on an IBM 7090. Listings are printed on an IBM 1401.

Additional Programming

Data processing vs. scientific programming. Subroutines and executive routines. Assembly.

Systems Design

Feasibility and applications studies, principles of systems design. Fragmented, integrated and total systems. Storage and retrieval systems. Responsibilities of management in systems design and approval. Equipment evaluation, selection and acquisition. Dealing with hardware and software contractors. Considerations in contracting for software. Monitoring of software contracts.

Conversion

Planning for conversion. Staffing and training considerations. Selection of computer personnel. Planning the physical installation. File conversion problems. Implementing the new system. Input cleanup.

Data Processing Management

Objectives. Electric accounting machine - computer scheduling. Selection of applications - priorities. Managing systems analysts and programmers. Reporting. Costs. Relationships with people outside of data processing installation. Languages and assemblers. Higher level languages and compilers. Monitors and executive routines.

Computer Peripheral Equipment

Buffers, input devices and output devices. Transmission equipment, remote terminals, electronic information display equipment, plotters, magnetic ink character recognition, scanners.

Real-Time Systems

Survey of real-time and command and control applications. Considerations in real-time and command and control systems. Interfaces with radar devices, analog computers and data transmission devices. Development of command and control systems.

Computer Applications

Survey of data processing applications. Management support applications. Real-time business type systems. Communications. Interfacing of systems. Standards and compatibility.

Operations Research

Principles of management science. Techniques of operations research. Operations research and optimum decisions. Gaming theory. Advanced management techniques -- PERT and CPM.

Enclosure (1)

Legal Considerations

Current computer legislation. Control of computers in the
Federal Government. Legal implication of computers. Locus of legal
responsibility.

Computer Developments

Future technological developments – hardware and software.
Associative memories. Heuristics. Circuit media.

-3-   Enclosure (1)